

## UDOT RESEARCH & DEVELOPMENT REPORT ABSTRACT

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| <b>15. Supplementary Notes</b><br><div style="text-align: center;">Lisa Gion Peters, FHWA Utah Division, Program Administrator; William R. Gedris, FHWA Utah Division, <b>Hamid</b> Ghasemi, FHWA TFHRC, and Albert F. Dimillio, FHWA TFHRC, Program Technical Contacts</div>   |  |  |                  |
| <b>16. Abstract</b><br><p>Phase 2 of a program is detailed that will perform research during the design/build reconstruction of over 16 miles of Interstate 15 in Salt Lake County, Utah. The program is <b>funded</b> through a research grant from the FHWA authorized by TEA-2 1 legislation specifically targeted to the I- 15 National Test Bed Consortium. The program is administered jointly by the Utah Transportation Center, the Utah Department of Transportation and the Federal Highway Administration. Included in the program are technology transfer efforts beyond distribution of the <b>final</b> report.</p> <p>This program is a follow-on to a Phase 1 research program, a summary of which is also given. In addition, a summary is given of the steps taken to accommodate research in a design/build environment.</p> <p>Detailed work plans are given for six research studies that are to be performed under this Phase 2 program. These six studies are:</p> <ul style="list-style-type: none"> <li>• Push-Over Test of Bridge Bent w/ Advanced Composite Reinforcement, Phase 2;</li> <li>• Evaluation of Geopier Foundation Systems, Phase 2;</li> <li>• Lateral Load Field Tests on Pile Groups, Phase 3;</li> <li>• Field Testing &amp; Computer Modeling of a Curved Steel Girder Bridge, Phase 1;</li> <li>• Forced Vibration as an NDE Technology, Phase 2; and,</li> <li>• Existing Column / Beam Evaluation, Phase 1</li> </ul> |  |  |                  |
| <b>17. Key Words</b><br><div style="text-align: center;">Research, design/build, seismic, bridge testing, bridge repair,<br/>bridge retrofit, FRP, composite materials, geopiers, deep<br/>foundations, pile foundations, bridge foundations, curved girder,<br/>bridge girder, steel girder, nondestructive testing, nondestructive<br/>evaluation, forced vibration</div>   |  | <b>18. Distribution Statement</b><br><div style="text-align: center;">No restriction. This document is available<br/>to the public through the National<br/>Technical Information Service, Springfield,<br/>VA 22161</div> |                  |
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